IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Enabling the Future - Developing the Space Workforce (5)

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ENROLLING AND COLLABORATING WITH INDUSTRY EXPERTS

Abstract

How do we engage, inspire and empower young minds through connection with industry experts? How can we use and scale proven methods for collaboration between young people and aerospace experts to feed that pipeline for the future workforce?

At iLEAD Student Aerospace Projects (iSAP), authentic aerospace-related projects are offered to young people through iLEAD Charter schools, a network of public schools using Project-Based Learning and Social-Emotional Learning as the educational delivery system. A component within each of the projects requires and supports the development of young peoples' skills to connect with industry experts.

We've found the connection to industry experts to be some of the most impactful portions of space-related projects, as most young people are not aware of associated careers and pathways in the aerospace industry. In addition, because iLEAD Schools are public charter schools, these opportunities are often offered to students from low socio-economic backgrounds with little to no college experience within their families of origin. It's through the relationships born out of shared student to professional collaboration that the magic occurs. Students are inspired and invited to the table of more complex and challenging skills and content than usually expected of young people.

We have also found that industry experts, passionate about their field, are not sure how to "give back" or inspire the next generation. The framework iSAP utilizes is a bridge between young people, their teachers and industry experts with proven results. This includes engaging the expertise of professionals and colleges (i.e., UCLA and Hartnell College), businesses (i.e. Deathwish Coffee) and space research agencies (i.e. NASA Ames and NASA Johnson) to work directly with young people on aerospace-related projects and outcomes, specifically designing experiments to be run on the ISS, doing ground truth and post-flight analysis. The nut we've cracked is this framework that deconstructs how to locate and reach out to industry experts, how to frame the "ask" and how the professional will be incorporated, with time commitments and outcomes clearly defined.

We've found that targeting young people, as young as 4th grade, is a great place to start! This is where the seeds of inspiration and passion are sewn, using the natural curiosity of young people which fuels them through the challenging years of adolescence, opening the horizon for college and careers.